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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,458	03/15/2004	Clifford T. Schmitt	FARA-1-1002	1223

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EXAMINER	
CHRISTENSEN, RYAN S	

ART UNIT	PAPER NUMBER
2856	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/800,458	SCHMITT ET AL.	
	Examiner	Art Unit	
	Ryan Christensen	2856	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19 and 21-23* is/are rejected.

7)☒ Claim(s) *20* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 18 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 18 recites the limitation "the mounting plate." There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102(e)

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 5-19, and 21-23 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,666,068 (Boyd). With respect to claim 1, Boyd discloses a method for monitoring the subsurface under a facility for volatile organic compounds (abstract), comprising: evaluating a facility for applicability of subsurface monitoring of volatile organic compounds(Col. 4, lines 30-33); if subsurface monitoring of volatile

organic compounds is appropriate at the facility, determining the location at which to monitor subsurface volatile organic compounds at the facility(Col. 4, lines 30-33); installing a volatile organic compound monitoring station at the determined location at the facility (Col. 4, lines 30-33); collecting soil vapor samples using the volatile organic compound monitoring station (abstract); and analyzing the collected soil vapor sample for the presence of volatile organic compounds(abstract).

With respect to claim 2, Boyd discloses determining the location at which to monitor subsurface volatile organic compounds at the facility is based on at least one of the proximity to where volatile organic compounds are found at the facility or the location where volatile organic compound release to the subsurface under the facility is made possible by the facility structure (Col. 4, lines 30-33).

With respect to claim 3, Boyd discloses if volatile organic compounds are present in the collected soil vapor sample, investigating the subsurface under the facility to determine if significant quantities of volatile organic compounds are present (Col. 5, lines 29-41).

With respect to claim 5, Boyd discloses a method for installing a volatile organic compound monitoring station for sampling soil gas in the subsurface under a facility, comprising (Col. 5, lines 29-41): creating a surface penetration at a facility (Col. 5, lines 45-51); inserting a monitoring station into the surface penetration (Col. 5, lines 52-56); and forming a seal between the monitoring station and the facility surface (Col. 5, lines 58-63).

With respect to claim 6, Boyd discloses forming a seal between the monitoring station and the facility surface further comprises applying a sealant to the facility surface substantially around the surface penetration to facilitate creation of the seal between the monitoring station and the facility surface (Col. 5, lines 58-63).

With respect to claim 7, Boyd discloses The method of claim 5, wherein the monitoring station has a hollow, generally tubular shape and further comprising closing the monitoring station by inserting a monitoring station cap into the hollow, generally tubular-shaped monitoring station (Fig. 8).

With respect to claim 8, Boyd discloses a method for obtaining a sample of soil gas from the subsurface under a facility surface, comprising: coupling a sampling pump to a monitoring station inserted into a surface penetration in the facility surface, wherein the monitoring station is in communication with the subsurface under the facility surface (abstract); if the soil gas in the subsurface under the facility surface needs to be purged, drawing and releasing a sample of soil gas from the subsurface through the monitoring station using the sampling pump (Col. 7, line 66 to Col. 8, line 38); drawing a sample of soil gas from the subsurface through the monitoring station using the sampling pump .

With respect to claim 9, Boyd discloses the monitoring station has a first monitoring end (Fig. 2, 13) through which soil gas samples are drawn and a second sampling end (Fig. 2) configurable to be coupled to the sampling pump (Fig. 1).

With respect to claim 10, Boyd discloses the monitoring station has a substantially hollow, generally tubular shape (Fig. 2); the monitoring station is closed using a monitoring station cap (Fig. 6, 58); and coupling a sampling pump to the

monitoring station further comprises removing the monitoring station cap (Col. 6, lines 49-54).

With respect to claim 11, Boyd discloses a method for obtaining a sample of soil gas from the subsurface under a facility surface (abstract), comprising: coupling a sampling adaptor (Fig. 8, 63) to a monitoring port (Fig. 2, 56) inserted into a surface penetration in the facility surface (Fig. 1), wherein the monitoring port is in communication with the subsurface under the facility surface (Fig 1); attaching a sampling pump (Fig. 1, 20) to the sampling adaptor (Fig. 1); if the soil gas in the subsurface under the facility surface needs to be purged, drawing and releasing a sample of soil gas from the subsurface through the sampling adaptor using the sampling pump (Col. 7, line 66 to Col. 8, line 38); drawing a sample of soil gas from the subsurface through the sampling adaptor using the sampling pump (Col. 8, lines 23-38).

With respect to claim 12, Boyd discloses the monitoring port has a substantially hollow, generally tubular shape (Fig 1); the monitoring port is closed using a monitoring port cap (Fig. 6, 58); and coupling a sampling adaptor to the monitoring port further comprises removing the monitoring port cap (Col. 6, lines 49-54).

With respect to claim 13, Boyd discloses a system for monitoring the subsurface under a facility surface for volatile organic compounds (abstract), comprising: a monitoring station (Fig. 1, 12) inserted into a surface penetration in the facility surface so as to provide communication between the monitoring station and the subsurface under the facility surface (Fig. 1); a sampling pump (Fig.1, 20) configurable to be coupled to the monitoring station for drawing a sample of soil gas from the subsurface

through the monitoring station (Col. 8 lines 24-38); and wherein: the sampling pump is coupled to the monitoring station (Fig.1); and a soil gas sample is drawn from the subsurface through the monitoring station using the sampling pump (Col. 8 lines 24-38).

With respect to claim 14, Boyd discloses the soil gas being drawn from the subsurface through the monitoring station using the sampling pump to purge the soil gas prior to obtaining a soil gas sample. (Col. 7, line 66 to Col. 8, line 38).

With respect to claim 15, Boyd discloses a system for monitoring the subsurface under a facility surface for volatile organic compounds (abstract), comprising: a soil probe (Fig. 1, 12) inserted into a surface penetration in the facility surface (Fig. 1), where the surface penetration provides communication between the soil probe and the subsurface under the facility surface (Fig 1), comprising: a monitoring port (Fig. 2, 56) secured within the surface penetration (Fig. 1) having an end filter (Fig. 2, 15) in communication with the subsurface under the facility surface (Fig 2); a monitoring port cap (Fig. 6, 58) configured to close the monitoring port to minimize the movement of undesirable materials between the facility atmosphere and the subsurface via the monitoring port (); and a sampling adaptor (Fig. 8, 63) configured to interface with the monitoring port to allow the withdrawal of a soil gas sample from the subsurface under the facility surface (Fig. 8); a sampling pump (Fig. 1, 20) configured to interface with the sampling adaptor (Fig. 8, 63) and withdraw a soil gas sample from the subsurface under the facility surface; and wherein: the monitoring port cap is removed from the monitoring port prior to interfacing the sampling pump with the sampling adaptor (Col. 6, lines 49-

54).; and a soil gas sample is drawn through the monitoring port and the sampling adaptor using the sampling pump (Col. 8, lines 23-38).

With respect to claim 16, Boyd discloses soil gas being drawn from the subsurface through the sampling adaptor using the sampling pump to purge the soil gas prior to obtaining a soil gas sample (Col. 7, line 66 to Col. 8, line 38).

With respect to claim 17, Boyd discloses a soil probe for monitoring the subsurface under a facility surface for volatile organic compounds (abstract), comprising: a monitoring port (Fig. 2, 56) having an end filter (Fig. 2, 15) in communication with the subsurface under the facility surface (Fig. 2); a monitoring port cap (Fig. 6, 58) configured to close the monitoring port to minimize the movement of undesirable materials between the facility and the subsurface via the monitoring port; and a sampling adaptor (Fig. 8, 63) configured to interface with the monitoring port and a sampling pump to allow the withdrawal of a soil gas sample from the subsurface under the facility surface (Fig. 1).

With respect to claim 18, Boyd discloses the monitoring port (Fig. 2, 56) further comprising a threaded neck (Fig. 4, 54); and the soil probe further comprises a securing member (Fig. 8, 66) having threads corresponding to and configured to interface with the threaded neck of the mounting plate to secure the mounting plate so that the end filter of the mounting plate extends into the subsurface under the facility surface (Fig. 2).

With respect to claim 19, Boyd discloses the monitoring port is a substantially hollow, generally tubular-shaped member having a threaded interior (Fig 2); and the

monitoring port cap Fig. 5, 58) has a threaded exterior (Fig. 5, 60) corresponding to and configured to interface with the threaded interior of the monitoring port (Fig. 7).

With respect to claim 21, Boyd discloses the monitoring port cap has turning recesses formed therein (Fig. 6, 62); and further comprising a cap tool for use in the installation of the monitoring port cap (Col. 6, lines 49-54), the cap tool having turning pins corresponding in size and shape to the turning recesses of the monitoring port cap (Col. 6, lines 49-54).

With respect to claim 22, Boyd discloses the monitoring port cap has at least one sealing means (60 and 56) designed to create a substantially liquid and airtight seal between the monitoring port cap and the monitoring port when the monitoring port cap is used to close the monitoring port (Col. 6, lines 49-54).

With respect to claim 23, Boyd discloses A soil probe for monitoring the subsurface under a facility surface for volatile organic compounds, comprising: a means for allowing soil gas to be drawn from the subsurface under the facility surface (abstract); a means for minimizing the movement of undesirable materials between the facility and the subsurface via the means for allowing soil gas to be drawn from the subsurface under the facility surface (seal, Fig 2, 52); and a means for withdrawing a soil gas sample from the subsurface under the facility surface via means for allowing soil gas to be drawn from the subsurface under the facility surface (abstract).

Claim Rejections - 35 USC § 102 (b)

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,150,622 (Vollweiler). With respect to claim 1, Volleiler discloses a method for monitoring the subsurface under a facility for volatile organic compounds (abstract), comprising: evaluating a facility for applicability of subsurface monitoring of volatile organic compounds (Col. 2, lines 56-60); if subsurface monitoring of volatile organic compounds is appropriate at the facility, determining the location at which to monitor subsurface volatile organic compounds at the facility (Col. 2, lines 56-60); installing a volatile organic compound monitoring station at the determined location at the facility (Col. 2, lines 56-60); collecting soil vapor samples using the volatile organic compound monitoring station (Col. 1, lines 18-24); and analyzing the collected soil vapor sample for the presence of volatile organic compounds (abstract and Col. 1, lines 13-17).

With respect to claim 2, Vollweiler discloses determining the location at which to monitor subsurface volatile organic compounds at the facility is based on at least one of the proximity to where volatile organic compounds are found at the facility or the location where volatile organic compound release to the subsurface under the facility is made possible by the facility structure (Col. 2, lines 56-60).

With respect to claim 3, Vollweiler discloses if volatile organic compounds are present in the collected soil vapor sample, investigating the subsurface under the facility

to determine if significant quantities of volatile organic compounds are present (monitoring, abstract).

With respect to claim 4, Vollweiler maintaining data related to the collected soil vapor sample (Col. 3, lines 45-50).

With respect to claim 5, Vollweiler discloses a method for installing a volatile organic compound monitoring station for sampling soil gas in the subsurface under a facility, comprising (Col. 1, lines 29-41): creating a surface penetration at a facility (Col. 5, lines 45-51); inserting a monitoring station into the surface penetration (Col. 5, lines 52-56); and forming a seal between the monitoring station and the facility surface (Col. 5, lines 58-63).

Claim 13 is rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 4,807,707 (Handley). With respect to claim 13, Handley teaches a monitoring station inserted into a surface penetration in the facility surface so as to provide communication between the monitoring station and the subsurface under the facility surface (Fig. 3); a sampling pump configurable to be coupled to the monitoring station for drawing a sample of soil gas from the subsurface through the monitoring station (Col. 5, line 61 to Col. 6, line 6); and wherein: the sampling pump is coupled to the monitoring station (Col. 5, line 61 to Col. 6, line 6); and a soil gas sample is drawn from the subsurface through the monitoring station using the sampling pump(Col. 5, line 61 to Col. 6, line 6).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 8, 9, 11, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 4,807,707 (Handley) in view of U.S. Patent 4,452,091 (Richers). Hadley teaches all the limitations of claim 8 except it does not teach drawing and releasing a sample of soil gas from the subsurface through the monitoring station using the sampling pump if the soil gas in the subsurface under the facility surface needs to be purged. Richers discloses purging contaminated gases prior to withdrawing a soil gas sample (Col. 4, lines 1-24). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Cordry with the teachings of Richers in order to provide a more accurate sample of soil gas (Richers, Col. 1, lines 6-12).

With respect to claim 9, the combination of Hadley and Richers further teaches a sampling pump coupled to the monitoring station (Hadley, Col. 5, line 61 to Col. 6, line 6).

With respect to claim 11, Hadley teaches all the limitations of claim 11 except it does not teach drawing and releasing a sample of soil gas from the subsurface through the monitoring station using the sampling pump if the soil gas in the subsurface under the facility surface needs to be purged. Richers discloses purging contaminated gases prior to withdrawing a soil gas sample (Col. 4, lines 1-24).

With respect to claim 14, Hadley teaches all the limitations of claim 14 except it does not teach soil gas drawn from the subsurface through the monitoring station using a sampling pump to purge soil gas prior to obtaining a soil gas sample. Richers discloses purging contaminated gases prior to withdrawing a soil gas sample (Col. 4, lines 1-24).

Claim Objections

Claim 20 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 5,587,538 (Bratton) discloses a soil probe for sampling volatile organic compounds using a vacuum pump.

U.S. Patent 5,922,950 (Pemberton) discloses a soil probe for monitoring soil gas samples from multiple depths.

U.S. Patent 6,230,820 (Cordry) discloses a soil probe for collecting fluid samples (liquid and gas) with an annular seal to prevent undesired passage of fluids and soil.

U.S. Patent 6,000,481 (Heller) discloses a soil probe for collecting both fluids and soil samples.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan Christensen whose telephone number is 571-272-2683. The examiner can normally be reached on Monday - Friday, 8am - 5pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on 571-272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RSC

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